*IN THE UNITED STATES PATENT AND TRADEMARK OFFICE*

Applicant:    Mark Leslie SMYTHE et al.

Title:        PROTEIN ENGINEERING

Appl. No.:    Unassigned

Filing Date:  04/21/2001

Examiner:     Unassigned

Art Unit:     Unassigned

**PRELIMINARY AMENDMENT**

Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with 37 CFR §1.121, please substitute for original claims 7, 8, 11, 12, 14, 16-18 and 23 the following rewritten versions of the same claims, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

**IN THE CLAIMS:**

6.      (Amended) The method of claim 5, wherein the location and orientation of a side-chain of each said amino acid residue of said framework protein and the location and orientation of a side-chain of each of said two or more amino acid residues of said sample protein is simplified as a respective Cα-Cβ vector.

7.      (Amended) The method of claim 1, wherein the Cα-Cβ vector is in the form of a distance matrix representation.

8       (Amended) The method of claim 1, further including the step of modifying an amino acid sequence of said framework protein which corresponds to a